

WHAT IS CLAIMED IS:

1. A device (2) for processing management data for a communications network (N), representing the use of the resources and/or services within the said network, characterised in that it comprises processing means (5) arranged so as to determine primary data representing a state of use of the network (N) by at least one user who has made a service level agreement, or "SLA", with an operator of the said network, from the said management data, and then to compare the said state of use with ancillary data representing the said SLA, so as to determine an action to be undertaken in the event of the detection of at least one difference between the said primary data and the said ancillary data, the said processing means (5) being arranged in order to determine the said action to be undertaken amongst an action group comprising a proposal to modify the SLA made between the said user and the said operator and/or a proposal to modify the services and/or resources of the said network (N), and to adapt at least some of the SLA modification proposals according to the said difference detected.

2. A device according to Claim 1, characterised in that the said primary data represent a use of at least one service and/or of resources.

3. A device according to Claim 1, characterised in that the said processing means (5) are arranged so as to adapt at least some of the proposals to modify the services and/or resources of the said network according to at least one SLA modification proposal.

4. A device according to Claim 3, characterised in that the said processing means (5) are arranged so as to adapt at least some of the proposals to modify the services and/or resources of the said network according to tertiary data (MD).

5. A device according to Claim 1, characterised in that the said processing means (5) are arranged so as to determine at least some of the states of use in the form of a usage profile (SUP) in a chosen time interval, from management data corresponding to the said time interval.

10 6. A device according to Claim 1, characterised in that the said processing means (5) are arranged so as to determine an action to be undertaken from several states of use associated with different users or a state of use associated with a group of users.

15 7. A device according to Claim 1, characterised in that the said processing means (5) are arranged so as to automatically initiate an SLA modification when at least one condition is satisfied.

20 8. A device according to Claim 7, characterised in that the said processing means (5) are arranged so as to automatically initiate the said SLA modification when it is associated with an increase in the tariff of the user less than a penalty representing the violation of the SLA by the user.

9. A device according to Claim 1, characterised in that the said processing means (5) are arranged so as to make their determinations periodically.

25 10. A device (1) for managing a communications network (N), characterised in that it comprises a processing device (2) according to one of the preceding claims.

30 11. A method of processing management data for a communications network (N), representing the use of the resources and/or of the services within the said network, characterised in that it consists of determining primary data representing a state of use of the network (N) by at least one user who has made a service level agreement, or "SLA", with an operator of the said network, from the said management data, and then comparing the said state of use

with ancillary data representing the said SLA, so as to determine an action to be undertaken in the event of the detection of at least one difference between the said primary data and the said ancillary data, the said action to be undertaken is determined in an action group comprising a proposal to modify the SLA made between the said user and the said operator and/or a proposal to modify the services and/or resources of the said network (N), at least some of the SLA modification proposals are adapted according to the said difference detected.

5 12. A method according to Claim 11, characterised in that the said primary data represent a use of at least one service and/or resource or resources.

10 13. A method according to Claim 11, characterised in that at least some of the proposals to modify the services and/or resources of the said network (N) are adapted according to at least one proposal to modify the SLA.

15 14. A method according to Claim 13, characterised in that at least some of the proposals to modify the services and/or resources of the said network are adapted according to tertiary data (MD).

20 15. A method according to Claim 11, characterised in that at least some of the states of use are determined in the form of a usage profile (SUP) in a chosen time interval, from management data corresponding to the said time interval.

25 16. A method according to Claim 11, characterised in that some actions to be undertaken are determined from several states of use associated with different users or a state of use associated with a group of users.

30 17. A method according to Claim 11, characterised in that an SLA modification is instituted automatically when at least one condition is satisfied.

35 18. A method according to Claim 17, characterised in that the said SLA modification is instituted when it is

associated with an increase in the tariff of the user less than a penalty representing the violation of the SLA by the user.

19. A method according to Claim 11, characterised in
5 that the determinations are made periodically.

20. Use of the method, processing device (2) and management device (1) according to one of the preceding claims in networks chosen from a group comprising Internet (IP), ATM, Frame Relay, SDH and WDM networks.